UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/766,577	01/23/2001	Norio Nagai	0905-0254P-SP	2339
2292 7590 12/07/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747			EXAMINER	
			MISLEH, JUSTIN P	
FALLS CHURCH, VA 22040-0747			ART UNIT	PAPER NUMBER
			2622	
			NOTIFICATION DATE	DELIVERY MODE
			12/07/2007	ELECTRONIC

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

	Application No.	Applicant(a)				
	,	Applicant(s)				
Office Action Summan	09/766,577	NAGAI, NORIO				
Office Action Summary	Examiner	Art Unit				
	Justin P. Misleh	2622				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period value of the provision of time may be seen a statutory period value. Failure to reply within the set or extended period for reply will, by statute any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 02 O	1) Responsive to communication(s) filed on <u>02 October 2007</u> .					
2a) This action is <b>FINAL</b> . 2b) ⊠ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 48	53 O.G. 213.				
Disposition of Claims						
4) ⊠ Claim(s) 1, 2, 5 - 7, 9, and 10 is/are pending in 4a) Of the above claim(s) is/are withdraw 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1, 2, 5 - 7, 9, and 10 is/are rejected. 7) □ Claim(s) is/are objected to.	vn from consideration.					
8) Claim(s) are subject to restriction and/o	r election requirement.					
9) The specification is objected to by the Examine	r					
10) ☐ The drawing(s) filed on <u>23 January 2001</u> is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)  1) Notice of References Cited (PTO-892)	4) Interview Summary					
Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO/SB/08)     Paper No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	<del></del>				

Application/Control Number:

09/766,577 Art Unit: 2622

#### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 2, 2007 has been entered.

# Response to Arguments

- 2. Applicant's arguments filed October 2, 2007 have been fully considered but they are not persuasive.
- 3. Applicant argues, "Kowno does not disclose that the magnification of the image shown in Fig. 9 (i.e., a magnified image) can be changed by the user after the image shown in Fig. 9 has been displayed."
- 4. The Examiner respectfully disagrees with Applicant's position. Kowno states, "Operation of the zoom button 15 also changes the size of the previously recorded image at the time of displaying such an image ... [then,] by using the touch tablet 6A ... the size of the displayed image at the time of displaying the image can also be changed" (see paragraph 0183). Kowno also states, "at the time of displaying the images, portions of the displayed images to be enlarged can be selected by using the touch tablet 6A" (see paragraph 0159). Additionally, Kowno states, "If the zoom button 15 is operated while a previously recorded image is being

09/766,577

Art Unit: 2622

displayed on the LCD 6, the displayed image can be enlarged or reduced ... [in] addition, the magnification of the displayed image can be continuously adjusted in response to the actuation of the zoom button 15" (see paragraph 0126; emphasis added by Examiner).

- 5. The claim language simply requires, *inter alia*, "an electronic zoom device that allows the user to change magnification of the image of the designated electronic zoom area after the designated electronic zoom area is displayed on the entire display unit" (emphasis added by Examiner). By means of either or both the touch tablet 6A and the zoom button 15 described, Kowno clearly discloses an electronic zoom device that allows the user to change magnification of the image of the designated electronic zoom area after the designated electronic zoom area is displayed on the entire display unit.
- 6. For these reasons, the rejection will be maintained.

## Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. <u>Claims 1, 2, and 5 7</u> are rejected under 35 U.S.C. 103(a) as being unpatentable over Kowno et al. in view of Okamura in further view of Miyawaki et al.

The *Response* section above is fully incorporated into the following rejections.

Furthermore, the Examiner respectfully notes that method Claim 2 substantially and

substantively parallels apparatus Claim 1. Accordingly, these independent claims will be rejected together.

# Summary of Kowno et al.

Kowno et al. disclose, as stated in paragraphs 42, 56, 78, 81, 99, 157, 159, 162, 163, 170, 176, 184, and 185, an image sensing apparatus (1; figures 1-4) comprising optical zooming (via the lens system 3; figures 1-4) and electronic zooming (via CPU 39; figure 4) wherein the zooming is actuated via a standard telephoto/wide angle switch (15; figure 1) or via a user designation (see figures 8-11) on an display screen (via LCD 6; figures 2 and 4).

Kowno et al. also disclose that during image composition, when a preview image is displayed on the display screen (6), a user may operate the switch (15) or may designate, using the touch tablet (6A; figures 2 and 4), an area (via "a", "b", and "X" – figure 8) on the display screen (6) to perform zooming on the preview image (see transition from figures  $8 \rightarrow 9$ ).

According to Kowno et al., the zooming maybe strictly optical zooming by adjusting the focal length of a lens system (3; paragraph 157), maybe strictly digital zooming by enlarging through interpolation (paragraph 157), or maybe a combination of optical zooming and digital zooming (paragraph 181).

Lastly, Kowno et al. disclose a strobe/flash (4) for illuminating a scene, as necessary, during image composition (paragraph 42, 78, and 99).

9. For Claims 1 and 2, Kowno et al. disclose an image sensing apparatus (1) and a method of operating thereof comprising:

an image sensing device (CCD 20) for sensing the image of a subject and outputting image data representing the image of the subject;

a display control unit (CPU 39) for controlling a display unit (LCD 6) in such a manner that the image of the subject represented by the image data output from said image sensing device (CCD 20) will be displayed on a display screen (LCD 6),

a designating unit (Touch Tablet 6A) which allows a user to designate an electronic zoom area (figures 8 and 9);

a zoom changeover unit (CPU 39) that displays the designated electronic zoom area on an entire display unit (see figure 9);

an electronic zoom device that allows the user to change magnification of the image of the designated electronic zoom area (see figures 8-11) after the designated electronic zoom area is displayed on the entire display unit (see Examiner's explanation below);

a light-emission control unit (Strobe Driving Circuit 37) for controlling a strobe light-emission device (Strobe 4).

Kowno states, "Operation of the zoom button 15 also changes the size of the previously recorded image at the time of displaying such an image ... [then,] by using the touch tablet 6A ... the size of the displayed image at the time of displaying the image can also be changed" (see paragraph 0183). Kowno also states, "at the time of displaying the images, portions of the displayed images to be enlarged can be selected by using the touch tablet 6A" (see paragraph 0159). Additionally, Kowno states, "If the zoom button 15 is operated while a previously recorded image is being displayed on the LCD 6, the displayed image can be enlarged or reduced ... [in] addition, the magnification of the displayed image can be continuously adjusted in response to the actuation of the zoom button 15" (see paragraph 0126; emphasis added by Examiner).

The claim language simply requires, *inter alia*, "an electronic zoom device that allows the user to change magnification of the image of the designated electronic zoom area after the designated electronic zoom area is displayed on the entire display unit" (emphasis added by Examiner). By means of either or both the touch tablet 6A and the zoom button 15 described, Kowno clearly discloses an electronic zoom device that allows the user to change magnification of the image of the designated electronic zoom area after the designated electronic zoom area is displayed on the entire display unit.

While Kowno et al. teach illuminating an entire sensed image, which fully encompasses illuminating a part of the subject that corresponds to an image within the electronic zoom area in the entire sensed image and a recording control unit (CPU 39) for recording, on a recording medium (Memory Card 24), an image that has been captured by the image sensing device (CCD 20) after the image has been composed; Kowno et al. do not specifically disclose a light-emission control unit that is for controlling a strobe light-emission device in such a manner that the strobe light-emission device illuminates precisely a position of a subject that corresponds to the center point of the designated electronic zoom area.

In regards to the light emitting angle, in analogous art, Okamura also disclose an image sensing apparatus and a method of operating thereof including designating a zoom feature. More specifically, Okamura teaches, as shown in figures 1 and 2 and as stated in columns 3 (lines 1 - 5, 34 - 45, and 62 - 67) and 4 (lines 1 - 20), an image sensing apparatus including a zoom switch (113) such that when the zoom switch (113) is operated, a zoom lens (102) is moved accordingly, wherein a flash control device (109), also included in the image sensing apparatus, controls an angle of illumination of the flash (110) to correspond to a zoomed sensed image.

Moreover, Okamura "controls the illuminating angle of the flash device 110 according to the magnification varying information." Therefore, Okamura provides said light control unit changing a light emitting angle of the strobe light-emission device based on the zoomed image, as claimed. The Examiner stresses since the test for obviousness is what the combined teachings of the references would have suggested to those of ordinary skill in the art, it is irrelevant whether or not the zooming performed by Okamura is an optical zoom or an electronic zoom.

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to have changed a light emitting angle of the strobe light-emission device based on the electronically magnified image, as suggested by Okamura, in the image sensing apparatus and corresponding method, disclosed by Kowno et al., for the advantage of "taking a shot of an object with an adequate amount of exposure" (see column 1, lines 20 – 22, of Okamura).

Although, **Kwono et al. in view of Okamura still do not disclose** recording on the recording medium image data output from said image sensing device <u>AND</u> data indicating position of the electronic zoom area <u>OR</u> image data representing the image with the electronic zoom area.

In regards to the recording, in analogous art, Miyawaki et al. also disclose an image sensing apparatus for sensing an image of a subject and a designating unit for designating an electronic zoom area in the image of the subject. More specifically, Miyawaki et al. teach, as shown in figures 11 – 13, an image sensing apparatus for sensing an image of a subject (101) and a designating unit (104) for designating an electronic zoom area in the image of the subject (see sequence in figure 12). Furthermore, Miyawaki et al. also teach, as shown in figure 14 and as

stated in column 13 (lines 18 – 54), that an image corresponding to an image within the electronic zoom area (child image plane) and that the sensed image (total image plane) may be superimposed and recorded in a recording medium (103). Therefore, Miyawaki et al. provides recording on the recording medium (103) image data output from said image sensing device (total image plane) AND image data representing the image with the electronic zoom area (child image plane).

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art have recording on the recording medium image data output from said image sensing device and image data representing the image with the electronic zoom area, as taught by Miyawaki et al., in the image sensing apparatus, disclosed by Kowno et al. in view of Okamura, for the advantage of *providing a user perspective on the accuracy of user instructed image composition* (see column 14, lines 30 – 39, of Miyawaki et al.).

- 10. As for **Claim 5**, Kowno et al. disclose, as shown in figure 1, wherein said apparatus is a digital still camera (1).
- 11. As for Claim 6, Kowno et al. disclose, as stated in paragraphs 183 and 185, wherein said designating unit (Touch Tablet 6A) is a zoom-area designating switch of said digital still camera (1).

As shown in figure 2, the touch tablet (6A) is a part of the digital still camera (1). As stated in paragraphs 183 and 185, the touch tablet (6A) is used for designating the electronic zoom area on the image captured by the camera (1). Accordingly, the Examiner considers the touch table (6A) to be a zoom-area designating switch.

Application/Control Number:

09/766,577

Art Unit: 2622

12. As for **Claim 7**, Kowno et al. disclose, as stated in paragraphs 50 and 157, wherein the electronic zoom device electronically magnifies the image in the designated zoom area by changing a downsampling ratio ("thinning").

Page 9

13. <u>Claims 9 and 10</u> are rejected under 35 U.S.C. 103(a) as being unpatentable over Kowno et al. in view of Okamura.

The Summary of Kowno et al. section above is fully incorporated into the following rejections. Additionally, the Response section above is fully incorporated into the following rejections.

14. For **Claim 9**, Kowno et al. disclose an image sensing apparatus (1) and a method of operating thereof comprising:

an image sensing device (CCD 20) for sensing the image of a subject and outputting image data representing the image of the subject;

a display unit (LCD 6) for displaying the image of the subject (figure 8) represented by the image data;

a designating unit (Touch Tablet 6A) which allows a user to designate an electronic zoom area (figures 8 and 9);

a zoom changeover unit (CPU 39) that displays the designated electronic zoom area on an entire display unit (see figure 9);

an electronic zoom device that allows the user to change magnification of the image of the designated electronic zoom area (see figures 8-11); and

a light-emission control unit (Strobe Driving Circuit 37) for controlling a strobe light-emission device (Strobe 4).

Kowno states, "Operation of the zoom button 15 also changes the size of the previously recorded image at the time of displaying such an image ... [then,] by using the touch tablet 6A ... the size of the displayed image at the time of displaying the image can also be changed" (see paragraph 0183). Kowno also states, "at the time of displaying the images, portions of the displayed images to be enlarged can be selected by using the touch tablet 6A" (see paragraph 0159). Additionally, Kowno states, "If the zoom button 15 is operated while a previously recorded image is being displayed on the LCD 6, the displayed image can be enlarged or reduced ... [in] addition, the magnification of the displayed image can be continuously adjusted in response to the actuation of the zoom button 15" (see paragraph 0126; emphasis added by Examiner).

The claim language simply requires, *inter alia*, "an electronic zoom device that allows the user to change magnification of the image of the designated electronic zoom area after the designated electronic zoom area is displayed on the entire display unit" (emphasis added by Examiner). By means of either or both the touch tablet 6A and the zoom button 15 described, Kowno clearly discloses an electronic zoom device that allows the user to change magnification of the image of the designated electronic zoom area after the designated electronic zoom area is displayed on the entire display unit.

While Kowno et al. teach illuminating an entire sensed image, which fully encompasses illuminating a part of the subject that corresponds to an image within the electronic zoom area in the entire sensed image and a recording control unit (CPU 39) for recording, on a recording

medium (Memory Card 24), an image that has been captured by the image sensing device (CCD 20) after the image has been composed; **Kowno et al. do not specifically disclose** a light-emission control unit that is for controlling a strobe light-emission device in such a manner that the strobe light-emission device illuminates precisely a position of a subject that corresponds to the center point of the designated electronic zoom area.

In analogous art, Okamura also disclose an image sensing apparatus and a method of operating thereof including designating a zoom feature. More specifically, Okamura teaches, as shown in figures 1 and 2 and as stated in columns 3 (lines 1 - 5, 34 - 45, and 62 - 67) and 4 (lines 1 - 20), an image sensing apparatus including a zoom switch (113) such that when the zoom switch (113) is operated, a zoom lens (102) is moved accordingly, wherein a flash control device (109), also included in the image sensing apparatus, controls an angle of illumination of the flash (110) to correspond to a zoomed sensed image. Moreover, Okamura "controls the illuminating angle of the flash device 110 according to the magnification varying information." Therefore, Okamura provides said light control unit changing a light emitting angle of the strobe light-emission device based on the zoomed image, as claimed. The Examiner stresses since the test for obviousness is what the combined teachings of the references would have suggested to those of ordinary skill in the art, it is irrelevant whether or not the zooming performed by Okamura is an optical zoom or an electronic zoom.

Therefore, at the time the invention was made it would have been obvious to one with ordinary skill in the art to have changed a light emitting angle of the strobe light-emission device based on the electronically magnified image, as suggested by Okamura, in the image sensing apparatus and corresponding method, disclosed by Kowno et al., for the advantage of "taking a

09/766,577

Art Unit: 2622

shot of an object with an adequate amount of exposure" (see column 1, lines 20 – 22, of Okamura).

15. As for **Claim 10**, Kowno et al. disclose, as stated in paragraphs 50 and 157, wherein the electronic zoom device electronically magnifies the image in the designated zoom area by changing a downsampling ratio ("thinning").

#### Conclusion

16. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 571.272.7313. The Examiner can normally be reached on Monday through Friday from 8:00 AM to 5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Lin Ye can be reached on 571.272.7372. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Justin Misleh

Examiner, GAU 2622

November 29, 2007